



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,761	02/20/2002	Sang-Ho Chun	P56669	3465

7590 08/13/2003

Robert E. Bushnell
Suite 300
1522 K Street, N.W.
Washington, DC 20005

EXAMINER

BERCK, KENNETH A

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 08/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/077,761

Applicant(s)

CHUN SANG-HO

Examiner

Ken A Berck

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Office Action Summary

Application No.

10/077,761

Applicant(s)

CHANG SANG-HO

Examiner

Ken A Berck

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al. (US 6437496).

Regarding claim 1, Kim discloses (fig 6-7) an apparatus with a tension mask (51) having a screen part having a first area including a center region and having a second area distinguishable from the first and a mask frame (56) coupled to the tension mask and reinforced structural strength, the screen part including a plurality of real slots (52), dummy slots (55), and strip parts (53), the real slots being located in the first area (fig 8, the area including the 4 rows with real slots), the dummy slots being located in the second area (fig 8, the area including the 4 rows with dummy slots without real bridges).

Regarding claim 2, Kim discloses (figs 7 and 15) the first area being formed by a plurality of real bridges connecting adjacent ones of the strip parts to each other, the dummy slots in the second area being formed by a plurality of dummy bridges in the second area.

Art Unit: 2879

Regarding claim 3, Kim discloses (figs 14-15) the first area being symmetrically formed (the 4 symmetrical rows connected with the real slots) around a first axis and being symmetrically formed around a second axis perpendicular to the first axis.

Regarding claim 4, Kim discloses (fig 6) the first and second axis passing through a center point at a center of the screen (lines running through the middle of the screen).

Regarding claim 5, Kim discloses (fig 6) the screen part being arranged to have a first edge region substantially parallel to an X axis (fig 9, the upper edge parallel to the x axis of the 4 symmetrical rows connected with the real slots), the first area being symmetrically formed around a first imaginary line parallel to the X axis, the first area being symmetrically formed around a second imaginary line perpendicular to the X axis (the side edge of the 4 symmetrical rows, perpendicular to the x axis).

Regarding claim 6, Kim discloses the first and second imaginary lines being straight lines passing through a center point at a center of the screen part (fig 8-9, the lines surrounding the area of the 4 rows connected with real bridges).

Regarding claim 7, Kim discloses (fig 10) the screen part being arranged to have the first edge region on the X axis and a second edge region on a Y axis, the X and Y axis crossing each other at a corner region of the screen part, the first edge region having a length x' and the second edge region having a length y' , the first area being bordered by six lines connecting six points in sequence including at least two straight lines and up to four curved lines (fig 8, the straight lines of the edge of the rows and the curved lines of the dummy bridges).

Art Unit: 2879

Regarding claim 8, Kim discloses (fig 10) the screen part being arranged to have the first edge region on the X axis and a second edge region on a Y axis, the X and Y axis crossing each other at a corner region of the screen part, the first edge region having a length x' and the second edge region having a length y' , the first area being bordered by six lines connecting six points in sequence including at least two straight lines and up to four curved lines (fig 8, the straight lines of the edge of the rows and the curved lines of the dummy bridges).

Regarding claim 9, Kim discloses (fig 10) the screen part being arranged to have the first edge region on the X axis and a second edge region on a Y axis, the X and Y axis crossing each other at a corner region of the screen part, the first edge region having a length x' and the second edge region having a length y' , the first area being bordered by six lines connecting six points in sequence including at least two straight lines and up to four curved lines (fig 8, the straight lines of the edge of the rows and the curved lines of the dummy bridges).

Regarding claim 10, Kim discloses (fig 10) the screen part being arranged to have the first edge region on the X axis and a second edge region on a Y axis, the X and Y axis crossing each other at a corner region of the screen part, the first edge region having a length x' and the second edge region having a length y' , the first area being bordered by six lines connecting six points in sequence including at least two straight lines and up to four curved lines (fig 8, the straight lines of the edge of the rows and the curved lines of the dummy bridges).

Art Unit: 2879

Regarding claim 11, Kim discloses the first area being concavely shaped in a middle region of the second imaginary line (fig 8, one side of the dummy bridge).

Regarding claim 12, Kim discloses the first area being convexly shaped in a middle region of the second imaginary line (fig 8, the opposite side of the dummy bridge).

Regarding claim 13, Kim discloses (fig 6-7) an apparatus with a tension mask (51) having a screen part having a first area including a center region and having a second area distinguishable from the first and a mask frame (56) coupled to the tension mask and reinforced structural strength, the screen part including a plurality of real slots, dummy slots, and strip parts, the real slots being located in the first area (fig 8, the area including the 4 rows with real slots), the dummy slots being located in the second area with a upper and a lower part (fig 8, the area including the 4 rows with dummy slots).

Regarding claim 14, Kim discloses (figs 7 and 15) the first area being formed by a plurality of real bridges connecting adjacent ones of the strip parts to each other, the dummy slots in the second area being formed by a plurality of dummy bridges in the second area.

Regarding claim 15, Kim discloses (figs 14-15) the first area being symmetrically formed around a first axis (the 4 symmetrical rows connected with the real slots) and being symmetrically formed around a second axis perpendicular to the first axis.

Regarding claim 16, Kim discloses (fig 10) the screen part being arranged to have the first edge region on the X axis and a second edge region on a Y axis, the X

Art Unit: 2879

and Y axis crossing each other at a corner region of the screen part, the first edge region having a length x' and the second edge region having a length y' , the first area being bordered by six lines connecting six points in sequence including at least two straight lines and up to four curved lines (fig 8, the straight lines of the edge of the rows and the curved lines of the dummy bridges).

Regarding claim 17, Kim discloses (fig 6-7) a mask assembly with a pair of elastic members disposed between and connected to the supporting members with a tension mask (51) having a screen part having a first area including a center region and having a second area distinguishable from the first and a mask frame (56) coupled to the tension mask and reinforced structural strength, the screen part including a plurality of real slots, dummy slots, and strip parts, the real slots being located in the first area, the dummy slots being located in the second area with a upper and a lower part (fig 8, the area including the 4 rows with dummy slots).

Regarding claim 18, Kim discloses the first area being rectangular shape (area surrounding the 4 rows connected by the 4 bridges, fig 9).

Regarding claim 19, Kim discloses the first area being concavely shaped in a middle region of the second imaginary line (one side of the dummy bridge).

Regarding claim 20, Kim discloses the first area being convexly shaped in a middle region of the second imaginary line (the opposite of the dummy bridge).

Art Unit: 2879

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ken A Berck whose telephone number is (703)305-7984. The examiner can normally be reached on Mon-Fri 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (703)305-4794. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7382 for regular communications and (703)308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

Joseph Williams
Joseph Williams

kab *KAB*
August 7, 2003